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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,613	04/02/2004	Kia Silverbrook	HYG012US	9405
24011 7590 06/30/2008 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			EXAMINER HESS, DANIEL A	
			ART UNIT 2876	PAPER NUMBER
			MAIL DATE 06/30/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/815,613

**Applicant(s)**

SILVERBROOK ET AL.

**Examiner**

Daniel A. Hess

**Art Unit**

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-43 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 3-9, 12-29 and 32-43 is/are rejected.  
7) ☒ Claim(s) 10, 11, 30 and 31 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date 5/23/08  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to applicant's amendment of 4/15/2008, which has been entered into the electronic file of record.

The examiner notes that it may appear the examiner is providing new grounds of rejection on subject matter that has already been presented, but the examiner maintains that the previous rejection meets one definition of 'raster scanning.' Indeed, the previous rejection of former claim 2 had back and forth scanning, orthogonality, and a scanning patch. It is clear based on the applicant's response that the applicant favors another particular definition, and so the new rejection is based on this.

It is noted that 'raster scanning' may by one definition, simply involve back-and-forth scanning, without precessing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-5, 12-14, 16-18, 21- 25, 32-34, 36-38 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiordelisi (US 6,435,407) in view of Bridgelall et al. (US 5,637,856).

Re claim 1 :

Fiordelisi (figure 1) clearly shows a cart (receptacle) adapted to receive and retain product items, with an opening though which items are placed. There is (see in particular figure 4a) an omnidirectional scanning system 7a-7c at the entry point 5 of the cart. It is clear (column 4, lines 45-55 for example) that the laser scanner 7 works in 360 degrees to scan products automatically as they enter the cart at the entryptoint 5. See especially column 8, lines 1-15.

Further, the scanning system is described at column 5, lines 50-60: "it comprises the system 7 for electronically scanning standard (UPC/EAN) bar codes with the related laser optical scanning device 7 with omnidirectional reading characteristics (360 degrees with respect 25 to the desired label position and distance)." From this it is clear, that the scanner will indeed scan in the form of scan lines (scanning beams) because this is the type of scanning needed to read bar codes, given that Fiordelisi uses a laser beam.

Further (column 5, lines 45+), it is disclosed that "SHOPPING COMPUTER, as shown in FIG. 7b, comprises a dedicated area 6n1 to provide shopping information on the incoming product (purchase) (price, type, offer, provisional total amount, final total amount to be paid, and others)"

From this it is quite clear that the product is read and identified, for all of the above information requires product identification. The Examiner notes that the particular limitation that the product item includes a plurality of coded data portions is clearly conveyed in an intended-use manner. That limitation is found in the preamble, and furthermore the preceding clause refers to "the shopping receptacle being adapted to." It is clear that if Gogulski's cart is capable of identifying a product item with a single code on it, he will be able to so much more easily identify a product item with multiple codes on it.

Lacking in Fiordelisi is an explicit showing of the a raster scan pattern in the manner according to a meaning preferred by the applicant in most recent arguments. Fiordelisi has back and forth (raster) scanning, orthogonality, and a scanning patch. What the applicant apparently favors is scanning according to precessed raster scanning, where the orthogonality is not for a separate scan line but is in the precessing.

Bridgelall teaches (column 5, lines 34+) "in accordance with another aspect of the invention, the light beam is automatically controlled to describe a stationary or precessing raster scan pattern for decoding if the symbol is two-dimensional."

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In view of Bridgelall's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known precessed rastering in order to read 2D barcodes and also to comprehensively cover an area.

Re claims 3-5:

The presence of a computer system with communication capability is inherent. An action is taken based on identification of a product, namely (column 5, lines 35+) displaying information related to products.

See also claim 7, column 11, line 23: "a data or graphics display unit (6n) having an area dedicated to information (6n) about an on-going shopping operation"

This is just one of a variety of actions that can be taken following identification of a product.

Re claim 12: See column 5, lines 34+. There are different menu options for the cart.

These menu options may broadly be considered different modes.

Re claim 13: See discussion re claim 1, above.

Re claim 14: As discussed above, at least one type of information provided is (a) product information about the product.

Re claim 16: The very point of UPC is to distinguish products from each other.

Re claims 17-18, 37-38: Error correction (redundant encoding, use of a checksum bit, etc.) is well known in the art and its use is motivated by a need to reduce read errors. Reed-Solomon is one effective way of error correction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known Reed-Solomon encoding in order to reduce read errors .

Re claim 21- A UPC as discussed by Fiordelisi will provide at least product identity.

Re claim 22: Clearly a product's UPC will be found on one of the recited surfaces.

Re claims 23, 43: Placing encoding on multiple surfaces and/or covering substantial portions of a product surface are principles that are well established in package handling (i.e. postal processing).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known encoding on multiple surfaces and/or covering substantial portions of a product surface with the motivation to improve reading and improve odds of reading.

Re claim 24: See discussion re claim 1, above.

Re claim 25: See discussion re claim 3, above.

Re claim 32: See discussion re claim 12, above.

Re claim 33: Fiordelisi provides at least data on prices (see abstract for instance).

Re claim 34: See discussion re claim 14, above.

Re claim 36: See discussion re claim 16, above.

Re claims 41-42: See discussion re claims 21-22.

Claims 6-9, 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiordelisi/Bridgelall in view of Blauer (US 6,484,939).

Re claims 6, 9: In Fiordelisi, one portion of the computer system is the checkout computer that interacts with the scanning shopping cart (see figures 13). This is described especially at column 7, lines 10-20. At the checkout, there is payment such as by a card (column 7, lines 20-25). Thus, the checkout acts as a link associating the sensing device (cart) with a user by associating the purchase data gathered by the sensing device with the user's account. This is an indirect link however.

In Blauer (see abstract and whole document) a shopping cart is directly associated with and dissociated with a user.

In view of Blauer's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known association of a cart with a user so that transactions may occur directly with the cart or custom user data can be directly imported (an advantage Blauer gives in his abstract).

Re claim 7: The management, in Fiordelisi, of "already-purchased" and "not-yet-purchased" lists using the system is conveyed in Fiordelisi's abstract.

Re claim 8: Providing product lists of Fiordelisi (see abstract of Fiordelisi), at any time, would have been obvious because these lists are managed for the benefit of the shopper.



Re claims 26-29: See discussion re claims 6-9.

Claims 15, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
Fiordelisi/Bridgelall in view of Loof (US 6507279).

Loof makes clear that RFID or bar code scanners can alternately be used as a way to scan  
products in an assisted shopping scheme using a cart.

In view of Loof's teachings, it would have been obvious to one of ordinary skill in the art  
at the time the invention was made to substitute the old and well-known RFID tags for the bar  
codes of Fiordelisi because RFID tags do not require direct line-of-sight.

Claims 19-20, 39, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
Fiordelisi/Bridgelall in view of Albert et al. (US 4436991).

while Fiordelisi doesn't use infrared encoding, Albert teaches this, and further provides  
the motivation (column 1, lines 25-30) that infrared coding cannot be interfered with by  
unauthorized persons.

It would have been obvious to one of ordinary skill in the art at the time the invention  
was made to substitute the old and well-known infrared so that coding cannot be interfered with  
by unauthorized persons.

***Allowable Subject Matter***

Claims 10-11, 30-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Re claim 10, 31: The prior art fails to teach or fairly suggest, in the context of all other limitations in claims upon which the claim depends, position of a card in the receptacle opening to generate data indicative of the identity of the user and the identity of the sensing device.

***Response to Arguments***

Applicant's arguments filed 4/15/2008 have been fully considered but they are not persuasive.

The applicant has argued that Fiodilesi did not show raster scanning.

Bridgelall teaches (column 5, lines 34+) "in accordance with another aspect of the invention, the light beam is automatically controlled to describe a stationary or precessing raster scan pattern for decoding if the symbol is two-dimensional." Here it is also that there is a clear concept of stationary raster scanning without precessing, which clearly shows that raster scanning need not be precessed but can simply be motion a laser point light source across a line repeatedly, according to this definition.

For this present action, the examiner has taken the applicant's preferred definition. This is not to say that Fiordelisi fails to teach one kind of raster scanning.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel A Hess/  
Primary Examiner, Art Unit 2876  
6/26/08